D: SATELLITE NETWORK CHARACTERISTICS IN THE SPACE-TO-EARTH DIRECTION

SATELLITE TRANSMITTING ANTENNA BEAM DETAILS

5. CHARACTERISTICS OF THE BEAM

ADD/MOD/SUP of the beam: ☐

b. TRANSMITTING BEAM DESIGNATION: K1R

NOTE: For a steerable beam, the third character of the beam designation shall be "R"

OLD BEAM DESIGNATION (if changed): ☐☐☐

ANTENNA CHARACTERISTICS

c1/d1/f1. MAXIMUM ISOTROPIC GAIN: +/- dBi: + 44.0

g. POLARIZATION [1]: D

c2/d2. ANTENNA GAIN CONTOURS DIAGRAM ATTACHED SEE FIGURE NO: 01

e/f2. ANTENNA RADIATION PATTERN DIAGRAM ATTACHED SEE FIGURE NO: ☐☐

h. ESTIMATED ANTENNA GAIN DIAGRAM VS ORBIT LONGITUDE ATTACHED SEE FIGURE NO: 03

INFORMATION TO BE PROVIDED FOR THIS TRANSMITTING ANTENNA BEAM

2a. CLASS OF STATION	2b. NATURE OF SERVICE	2a. CLASS OF STATION	2b. NATURE OF SERVICE
EC	CR		

PERIOD OF VALIDITY: 20 Years

1. SERVICE AREA: ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ OR

SERVICE AREA DIAGRAM ATTACHED: 01

3/Fb. FREQUENCY RANGE WITHIN WHICH THE CARRIERS WILL BE LOCATED

	Add/Mod/Sup of the freq. range	FREQUENCY	k/M/G Hz	IFRB IDENTIFICATION NUMBER for modification/suppression
FROM	☐	17.7000	G	
TO	☐	20.2000	G	

SPACE STATION EMISSIONS AND ASSOCIATED RECEIVING STATION(S) INFORMATION

EMISSIONS AND POWER CHARACTERISTICS

6/4a3. NECESSARY BANDWIDTH OR Fc/G3a. DESIGNATION OF EMISSION [1]	4a2/4b. TOTAL PEAK POWER [1] +/- dBW	4a1/G3b. MAXIMUM POWER DENSITY +/- dBW/Hz	4c. MINIMUM CARRIER POWER [1] +/- dBW	Fd. SPACE STATION E.I.R.P. [1] +/- dBW	8. MODULATION CHARACTERISTICS ATTACHED SEE ATTACHMENT NO. [1]
125MG7W		-60.0			

F. SPACE STATION

CHARACTERISTICS OF RECEIVING SPACE STATIONS FOR SPACE-TO-SPACE RELAYS

ADD/MOD/SUP of the station: ☐

a. SPACE STATION NAME: ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

G3c. BEACON AND TELEMETRY INFORMATION ATTACHED. SEE ATTACHMENT NO.: [1] ☐☐

EARTH STATION

ADD/MOD/SUP of the station: ☐

DESIGNATION OF TYPICAL EARTH STATION: 85cm TERMINAL

8b1. RADIATION PATTERN (give reference pattern or provide diagram): REC S465-5

8b2. ANTENNA RADIATION DIAGRAM ATTACHED SEE FIGURE NO.: ☐☐

8a. RECEIVING SYSTEM NOISE TEMPERATURE: Kelvins: 200

MORE EMISSIONS ON NEXT PAGE: ☐

MORE ASSOC. RECEIVING STATIONS ON NEXT PAGE: X

REMARKS:

NOTES ON FILLING IN THIS PAGE :

FOR EACH BEAM FIRST FILL IN THE BOX TITLED 'CHARACTERISTICS OF THE BEAM'.
FOR EACH SPACE-TO-EARTH SERVICE AREA ASSOCIATED WITH THIS BEAM, FILL IN THE UPPER PORTION OF THE BOX TITLED 'INFORMATION TO BE PROVIDED FOR THIS TRANSMITTING ANTENNA BEAM'. ALSO PROVIDE THE "EMISSION AND POWER CHARACTERISTICS" FOR THIS TRANSMITTING ANTENNA BEAM. FOR EACH SIZE (TYPE) OF RECEIVING EARTH STATION PROVIDE THE EARTH STATION DETAILS AS SPECIFIED. IF THIS IS A SPACE-TO-SPACE RELAY, IDENTIFY THE OTHER SPACE STATION(S) IN THE BOX TITLED 'SPACE STATION'. USE AS MANY PAGES AS NECESSARY.

D: SATELLITE NETWORK CHARACTERISTICS IN THE SPACE-TO-EARTH DIRECTION

SATELLITE TRANSMITTING ANTENNA BEAM DETAILS

5. CHARACTERISTICS OF THE BEAM

ADD/MOD/SUP of the beam: ☐

b. TRANSMITTING BEAM DESIGNATION: K1R

NOTE: For a steerable beam, the third character of the beam designation shall be "R"

OLD BEAM DESIGNATION (if changed): ☐☐☐

ANTENNA CHARACTERISTICS

c1/d1/f1. MAXIMUM ISOTROPIC GAIN: +/- dBi → + 44.0

g. POLARIZATION 1: D

c2/d2. ANTENNA GAIN CONTOURS DIAGRAM ATTACHED SEE FIGURE NO: 01

e/f2. ANTENNA RADIATION PATTERN DIAGRAM ATTACHED SEE FIGURE NO: ☐☐

h. ESTIMATED ANTENNA GAIN DIAGRAM VS ORBIT LONGITUDE ATTACHED SEE FIGURE NO: 03

INFORMATION TO BE PROVIDED FOR THIS TRANSMITTING ANTENNA BEAM

2a. CLASS OF STATION	2b. NATURE OF SERVICE	2a. CLASS OF STATION	2b. NATURE OF SERVICE
EC	CR	☐☐	☐☐
☐☐	☐☐	☐☐	☐☐

PERIOD OF VALIDITY: 20 Years

1. SERVICE AREA: ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ OR

SERVICE AREA DIAGRAM ATTACHED: 01

3/Fb. FREQUENCY RANGE WITHIN WHICH THE CARRIERS WILL BE LOCATED

	Add/Mod/Sup of the freq. range	FREQUENCY k/M/G Hz	IFRB IDENTIFICATION NUMBER for modification/suppression
FROM	☐	17.700000 G	☐☐☐☐☐☐☐☐☐
TO	☐	20.200000 G	☐☐☐☐☐☐☐☐☐

SPACE STATION EMISSIONS AND ASSOCIATED RECEIVING STATION(S) INFORMATION

EMISSIONS AND POWER CHARACTERISTICS

8/4a3. NECESSARY BANDWIDTH OR Fc/G3a. DESIGNATION OF EMISSION 1	4a2/4b. TOTAL PEAK POWER 1 (+/- dBW)	4a1/G3b. MAXIMUM POWER DENSITY (+/- dBW/Hz)	4c. MINIMUM CARRIER POWER 1 (+/- dBW)	Fd. SPACE STATION E.I.R.P. 1 (+/- dBW)	8. MODULATION CHARACTERISTICS ATTACHED SEE ATTACHMENT NO. 1
125MG7W		-60.0			

F. SPACE STATION

CHARACTERISTICS OF RECEIVING SPACE STATIONS FOR SPACE-TO-SPACE RELAYS

ADD/MOD/SUP of the station: ☐

a. SPACE STATION NAME: ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

G3c. BEACON AND TELEMETRY INFORMATION ATTACHED. SEE ATTACHMENT NO.: 1 ☐☐

MORE EMISSIONS ON NEXT PAGE: ☐

MORE ASSOC. RECEIVING STATIONS ON NEXT PAGE: X

EARTH STATION

ADD/MOD/SUP of the station: ☐

DESIGNATION OF TYPICAL EARTH STATION: 120cm TERMINAL

8b1. RADIATION PATTERN (give reference pattern or provide diagram): REC S465-5

8b2. ANTENNA RADIATION DIAGRAM ATTACHED SEE FIGURE NO.: ☐☐

8a. RECEIVING SYSTEM NOISE TEMPERATURE (Kelvins): 200

REMARKS:

NOTES ON FILLING IN THIS PAGE :

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D: SATELLITE NETWORK CHARACTERISTICS IN THE SPACE-TO-EARTH DIRECTION

SATELLITE TRANSMITTING ANTENNA BEAM DETAILS

5. CHARACTERISTICS OF THE BEAM

ADD/MOD/SUP of the beam: ☐

b. TRANSMITTING BEAM DESIGNATION: K1R

NOTE: For a steerable beam, the third character of the beam designation shall be "R"

OLD BEAM DESIGNATION (if changed): ☐☐☐

ANTENNA CHARACTERISTICS

c1/d1/f1. MAXIMUM ISOTROPIC GAIN: +/- dBi: + 44.0

g. POLARIZATION [1]: D

c2/d2. ANTENNA GAIN CONTOURS DIAGRAM ATTACHED SEE FIGURE NO: 01

e/f2. ANTENNA RADIATION PATTERN DIAGRAM ATTACHED SEE FIGURE NO: ☐☐

h. ESTIMATED ANTENNA GAIN DIAGRAM VS ORBIT LONGITUDE ATTACHED SEE FIGURE NO: 03

INFORMATION TO BE PROVIDED FOR THIS TRANSMITTING ANTENNA BEAM

2a. CLASS OF STATION	2b. NATURE OF SERVICE	2a. CLASS OF STATION	2b. NATURE OF SERVICE
EC	CR	☐☐	☐☐
☐☐	☐☐	☐☐	☐☐

PERIOD OF VALIDITY: 20 Years

1. SERVICE AREA: ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ OR

SERVICE AREA DIAGRAM ATTACHED: 01

3/Fb. FREQUENCY RANGE WITHIN WHICH THE CARRIERS WILL BE LOCATED

	Add/Mod/Sup of the freq. range	FREQUENCY k/M/G Hz	IFRB IDENTIFICATION NUMBER for modification/suppression
FROM	☐	17.7000 G	☐☐☐☐☐☐☐☐☐
TO	☐	20.2000 G	☐☐☐☐☐☐☐☐☐

SPACE STATION EMISSIONS AND ASSOCIATED RECEIVING STATION(S) INFORMATION

EMISSIONS AND POWER CHARACTERISTICS

6/4a3. NECESSARY BANDWIDTH OR Fc/G3a. DESIGNATION OF EMISSION [1]	4a2/4b. TOTAL PEAK POWER [1] +/- dBW	4a1/G3b. MAXIMUM POWER DENSITY +/- dBW/Hz	4c. MINIMUM CARRIER POWER [1] +/- dBW	Fd. SPACE STATION E.I.R.P. [1] +/- dBW	8. MODULATION CHARACTERISTICS ATTACHED SEE ATTACHMENT NO. [1]
125MG7W		-60.0			
250MG7W		-63.0			

F. SPACE STATION

CHARACTERISTICS OF RECEIVING SPACE STATIONS FOR SPACE-TO-SPACE RELAYS

ADD/MOD/SUP of the station: ☐

a. SPACE STATION NAME: ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

G3c. BEACON AND TELEMETRY INFORMATION ATTACHED. SEE ATTACHMENT NO.: [1] ☐☐

EARTH STATION

ADD/MOD/SUP of the station: ☐

DESIGNATION OF TYPICAL EARTH STATION: 240cm TERMINAL

8b1. RADIATION PATTERN (give reference pattern or provide diagram): REC S465-5

8a. RECEIVING SYSTEM NOISE TEMPERATURE: Kelvins: 200

8b2. ANTENNA RADIATION DIAGRAM ATTACHED SEE FIGURE NO.: ☐☐

MORE EMISSIONS ON NEXT PAGE: ☐

MORE ASSOC. RECEIVING STATIONS ON NEXT PAGE: X

REMARKS:

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D: SATELLITE NETWORK CHARACTERISTICS IN THE SPACE-TO-EARTH DIRECTION

SATELLITE TRANSMITTING ANTENNA BEAM DETAILS

5. CHARACTERISTICS OF THE BEAM

ADD/MOD/SUP of the beam: ☐

b. TRANSMITTING BEAM DESIGNATION: K1R

NOTE: For a steerable beam, the third character of the beam designation shall be "R"

OLD BEAM DESIGNATION (if changed): ☐☐☐

ANTENNA CHARACTERISTICS

c1/d1/f1. MAXIMUM ISOTROPIC GAIN: +/- dBi: + 44.0

g. POLARIZATION [1]: D

c2/d2. ANTENNA GAIN CONTOURS DIAGRAM ATTACHED SEE FIGURE NO: 01

e/f2. ANTENNA RADIATION PATTERN DIAGRAM ATTACHED SEE FIGURE NO: ☐☐

h. ESTIMATED ANTENNA GAIN DIAGRAM VS ORBIT LONGITUDE ATTACHED SEE FIGURE NO: 03

INFORMATION TO BE PROVIDED FOR THIS TRANSMITTING ANTENNA BEAM

2a. CLASS OF STATION: EC	2b. NATURE OF SERVICE: CR	2a. CLASS OF STATION: ☐☐	2b. NATURE OF SERVICE: ☐☐
2a. CLASS OF STATION: ☐☐	2b. NATURE OF SERVICE: ☐☐	2a. CLASS OF STATION: ☐☐	2b. NATURE OF SERVICE: ☐☐

PERIOD OF VALIDITY: 20 Years

1. SERVICE AREA: ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ OR

SERVICE AREA DIAGRAM ATTACHED: 01

3/Fb. FREQUENCY RANGE WITHIN WHICH THE CARRIERS WILL BE LOCATED

	Add/Mod/Sup of the freq. range	FREQUENCY k/M/G Hz	IFRB IDENTIFICATION NUMBER for modification/suppression
FROM	☐	17.7000 G	☐☐☐☐☐☐☐☐☐
TO	☐	20.2000 G	☐☐☐☐☐☐☐☐☐

SPACE STATION EMISSIONS AND ASSOCIATED RECEIVING STATION(S) INFORMATION

EMISSIONS AND POWER CHARACTERISTICS

6/4a3. NECESSARY BANDWIDTH OR Fc/G3a. DESIGNATION OF EMISSION [1]	4a2/4b. TOTAL PEAK POWER [1] +/- dBW	4a1/G3b. MAXIMUM POWER DENSITY +/- dBW/Hz	4c. MINIMUM CARRIER POWER [1] +/- dBW	Fd. SPACE STATION E.I.R.P. [1] +/- dBW	8. MODULATION CHARACTERISTICS ATTACHED SEE ATTACHMENT NO. [1]
125MG7W		-60.0			
250MG7W		-63.0			

F. SPACE STATION

CHARACTERISTICS OF RECEIVING SPACE STATIONS FOR SPACE-TO-SPACE RELAYS

ADD/MOD/SUP of the station: ☐

a. SPACE STATION NAME: ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

G3c. BEACON AND TELEMETRY INFORMATION ATTACHED. SEE ATTACHMENT NO.: [1] ☐☐

EARTH STATION

ADD/MOD/SUP of the station: ☐

DESIGNATION OF TYPICAL EARTH STATION: 300cm TERMINAL

8b1. RADIATION PATTERN (give reference pattern or provide diagram): REC S465-5

8b2. ANTENNA RADIATION DIAGRAM ATTACHED SEE FIGURE NO.: ☐☐

8a. RECEIVING SYSTEM NOISE TEMPERATURE (Kelvins): 200

MORE EMISSIONS ON NEXT PAGE: ☐

MORE ASSOC. RECEIVING STATIONS ON NEXT PAGE: X

REMARKS:

NOTES ON FILLING IN THIS PAGE :

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D: SATELLITE NETWORK CHARACTERISTICS IN THE SPACE-TO-EARTH DIRECTION

SATELLITE TRANSMITTING ANTENNA BEAM DETAILS

5. CHARACTERISTICS OF THE BEAM

ADD/MOD/SUP of the beam: ☐

b. TRANSMITTING BEAM DESIGNATION: K1R

NOTE: For a steerable beam, the third character of the beam designation shall be "R"

OLD BEAM DESIGNATION (if changed): ☐☐☐

ANTENNA CHARACTERISTICS

c1/d1/f1. MAXIMUM ISOTROPIC GAIN: +/- | dBi = + | 44●0

g. POLARIZATION [1]: D

c2/d2. ANTENNA GAIN CONTOURS DIAGRAM ATTACHED SEE FIGURE NO: 01

e/f2. ANTENNA RADIATION PATTERN DIAGRAM ATTACHED SEE FIGURE NO: ☐☐

h. ESTIMATED ANTENNA GAIN DIAGRAM VS ORBIT LONGITUDE ATTACHED SEE FIGURE NO: 03

INFORMATION TO BE PROVIDED FOR THIS TRANSMITTING ANTENNA BEAM

2a. CLASS OF STATION	2b. NATURE OF SERVICE	2a. CLASS OF STATION	2b. NATURE OF SERVICE
EC	CR	☐☐	☐☐
☐☐	☐☐	☐☐	☐☐

PERIOD OF VALIDITY: 20 Years

1. SERVICE AREA: ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ OR

SERVICE AREA DIAGRAM ATTACHED: 01

3/Fb. FREQUENCY RANGE WITHIN WHICH THE CARRIERS WILL BE LOCATED

	Add/Mod/Sup of the freq. range	FREQUENCY k/M/G Hz	IFRB IDENTIFICATION NUMBER for modification/suppression
FROM	☐	17●7000G	☐☐☐☐☐☐☐☐☐
TO	☐	20●2000G	☐☐☐☐☐☐☐☐☐

SPACE STATION EMISSIONS AND ASSOCIATED RECEIVING STATION(S) INFORMATION

EMISSIONS AND POWER CHARACTERISTICS

6/4a3. NECESSARY BANDWIDTH OR Fc/G3a. DESIGNATION OF EMISSION [1]	4a2/4b. TOTAL PEAK POWER [1] +/- dBW	4a1/G3b. MAXIMUM POWER DENSITY +/- dBW/Hz	4c. MINIMUM CARRIER POWER [1] +/- dBW	Fd. SPACE STATION E.I.R.P. [1] +/- dBW	8. MODULATION CHARACTERISTICS ATTACHED SEE ATTACHMENT NO. [1]
125MG7W	●___	-60●0	●___	●___	☐☐
250MG7W	●___	-63●0	●___	●___	☐☐
☐☐☐☐☐☐☐☐	●___	●___	●___	●___	☐☐
☐☐☐☐☐☐☐☐	●___	●___	●___	●___	☐☐
☐☐☐☐☐☐☐☐	●___	●___	●___	●___	☐☐
☐☐☐☐☐☐☐☐	●___	●___	●___	●___	☐☐

F. SPACE STATION

CHARACTERISTICS OF RECEIVING SPACE STATIONS FOR SPACE-TO-SPACE RELAYS

ADD/MOD/SUP of the station: ☐

a. SPACE STATION NAME: ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

G3c. BEACON AND TELEMETRY INFORMATION ATTACHED. SEE ATTACHMENT NO.: [1] ☐☐

MORE EMISSIONS ON NEXT PAGE: ☐

MORE ASSOC. RECEIVING STATIONS ON NEXT PAGE: ☐

EARTH STATION

ADD/MOD/SUP of the station: ☐

DESIGNATION OF TYPICAL EARTH STATION: 450cm TERMINAL

8b1. RADIATION PATTERN (give reference pattern or provide diagram): REC S465-5

8b2. ANTENNA RADIATION DIAGRAM ATTACHED SEE FIGURE NO.: ☐☐

8a. RECEIVING SYSTEM NOISE TEMPERATURE: 200 Kelvins

REMARKS:

NOTES ON FILLING IN THIS PAGE :

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D: SATELLITE NETWORK CHARACTERISTICS IN THE SPACE-TO-EARTH DIRECTION

SATELLITE TRANSMITTING ANTENNA BEAM DETAILS

5. CHARACTERISTICS OF THE BEAM

ADD/MOD/SUP of the beam: ☐

b. TRANSMITTING BEAM DESIGNATION: K2R

NOTE: For a steerable beam, the third character of the beam designation shall be "R"

OLD BEAM DESIGNATION (if changed): ☐☐☐

ANTENNA CHARACTERISTICS

c1/d1/f1. MAXIMUM ISOTROPIC GAIN: +/- dBi → + 41●0

g. POLARIZATION [1]: D

c2/d2. ANTENNA GAIN CONTOURS DIAGRAM ATTACHED SEE FIGURE NO: 02

e/f2. ANTENNA RADIATION PATTERN DIAGRAM ATTACHED SEE FIGURE NO: ☐☐

h. ESTIMATED ANTENNA GAIN DIAGRAM VS ORBIT LONGITUDE ATTACHED SEE FIGURE NO: 03

INFORMATION TO BE PROVIDED FOR THIS TRANSMITTING ANTENNA BEAM

2a. CLASS OF STATION	2b. NATURE OF SERVICE	2a. CLASS OF STATION	2b. NATURE OF SERVICE
EC	CR	☐☐	☐☐
☐☐	☐☐	☐☐	☐☐

PERIOD OF VALIDITY: 20 Years

1. SERVICE AREA: ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ OR

SERVICE AREA DIAGRAM ATTACHED: 02

3/Fb. FREQUENCY RANGE WITHIN WHICH THE CARRIERS WILL BE LOCATED

	Add/Mod/Sup of the freq. range	FREQUENCY	k/M/G Hz	IFRB IDENTIFICATION NUMBER for modification/suppression
FROM	☐	17●700	G	☐☐☐☐☐☐☐☐☐
TO	☐	20●200	G	☐☐☐☐☐☐☐☐☐

SPACE STATION EMISSIONS AND ASSOCIATED RECEIVING STATION(S) INFORMATION

EMISSIONS AND POWER CHARACTERISTICS

6/4a3. NECESSARY BANDWIDTH OR Fc/G3a. DESIGNATION OF EMISSION [1]	4a2/4b. TOTAL PEAK POWER [1] +/- dBW	4a1/G3b. MAXIMUM POWER DENSITY +/- dBW/Hz	4c. MINIMUM CARRIER POWER [1] +/- dBW	Fd. SPACE STATION E.I.R.P. [1] +/- dBW	8. MODULATION CHARACTERISTICS ATTACHED SEE ATTACHMENT NO. [1]
125MG7W	●●	-60●0	●●	●●	☐☐
250MG7W	●●	-63●0	●●	●●	☐☐
☐☐☐☐☐☐☐☐☐	●●	●●	●●	●●	☐☐
☐☐☐☐☐☐☐☐☐	●●	●●	●●	●●	☐☐
☐☐☐☐☐☐☐☐☐	●●	●●	●●	●●	☐☐
☐☐☐☐☐☐☐☐☐	●●	●●	●●	●●	☐☐

F. SPACE STATION

CHARACTERISTICS OF RECEIVING SPACE STATIONS FOR SPACE-TO-SPACE RELAYS

ADD/MOD/SUP of the station: ☐

a. SPACE STATION NAME: ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

G3c. BEACON AND TELEMETRY INFORMATION ATTACHED. SEE ATTACHMENT NO.: [1] ☐☐

EARTH STATION

ADD/MOD/SUP of the station: ☐

DESIGNATION OF TYPICAL EARTH STATION: 240cm TERMINAL

8b1. RADIATION PATTERN (give reference pattern or provide diagram): REC S465-5

8b2. ANTENNA RADIATION DIAGRAM ATTACHED SEE FIGURE NO.: ☐☐

8a. RECEIVING SYSTEM NOISE TEMPERATURE: 200 Kelvins

MORE EMISSIONS ON NEXT PAGE: ☐

MORE ASSOC. RECEIVING STATIONS ON NEXT PAGE: X

REMARKS:

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D: SATELLITE NETWORK CHARACTERISTICS IN THE SPACE-TO-EARTH DIRECTION

SATELLITE TRANSMITTING ANTENNA BEAM DETAILS

5. CHARACTERISTICS OF THE BEAM

ADD/MOD/SUP of the beam: [ ]

b. TRANSMITTING BEAM DESIGNATION: K2R

NOTE: For a steerable beam, the third character of the beam designation shall be "R"

OLD BEAM DESIGNATION (if changed): [ ]

ANTENNA CHARACTERISTICS

c1/d1/f1. MAXIMUM ISOTROPIC GAIN: +/- dBi: + 41.0

g. POLARIZATION [1]: D

c2/d2. ANTENNA GAIN CONTOURS DIAGRAM ATTACHED SEE FIGURE NO: 02

e/f2. ANTENNA RADIATION PATTERN DIAGRAM ATTACHED SEE FIGURE NO: [ ]

h. ESTIMATED ANTENNA GAIN DIAGRAM VS ORBIT LONGITUDE ATTACHED SEE FIGURE NO: 03

INFORMATION TO BE PROVIDED FOR THIS TRANSMITTING ANTENNA BEAM

2a. CLASS OF STATION: EC	2b. NATURE OF SERVICE: CR	2a. CLASS OF STATION: [ ]	2b. NATURE OF SERVICE: [ ]
2a. CLASS OF STATION: [ ]	2b. NATURE OF SERVICE: [ ]	2a. CLASS OF STATION: [ ]	2b. NATURE OF SERVICE: [ ]

PERIOD OF VALIDITY: 20 Years

1. SERVICE AREA: [ ] OR SERVICE AREA DIAGRAM ATTACHED: 02

3/Fb. FREQUENCY RANGE WITHIN WHICH THE CARRIERS WILL BE LOCATED

	Add/Mod/Sup of the freq. range	FREQUENCY k/M/G Hz	IFRB IDENTIFICATION NUMBER for modification/suppression
FROM	[ ]	17.7000 G	
TO	[ ]	20.2000 G	

SPACE STATION EMISSIONS AND ASSOCIATED RECEIVING STATION(S) INFORMATION

EMISSIONS AND POWER CHARACTERISTICS

6/4a3. NECESSARY BANDWIDTH OR Fc/G3a. DESIGNATION OF EMISSION [1]	4a2/4b. TOTAL PEAK POWER [1] +/- dBW	4a1/G3b. MAXIMUM POWER DENSITY +/- dBW/Hz	4c. MINIMUM CARRIER POWER [1] +/- dBW	Fd. SPACE STATION E.I.R.P. [1] +/- dBW	8. MODULATION CHARACTERISTICS ATTACHED SEE ATTACHMENT NO. [1]
125MG7W		-60.0			
250MG7W		-63.0			

F. SPACE STATION

CHARACTERISTICS OF RECEIVING SPACE STATIONS FOR SPACE-TO-SPACE RELAYS

ADD/MOD/SUP of the station: [ ]

a. SPACE STATION NAME: [ ]

G3c. BEACON AND TELEMETRY INFORMATION ATTACHED. SEE ATTACHMENT NO.: [1] [ ]

EARTH STATION

ADD/MOD/SUP of the station: [ ]

DESIGNATION OF TYPICAL EARTH STATION: 300cm TERMINAL

8b1. RADIATION PATTERN (give reference pattern or provide diagram): REC S465-5

8b2. ANTENNA RADIATION DIAGRAM ATTACHED SEE FIGURE NO.: [ ]

8a. RECEIVING SYSTEM NOISE TEMPERATURE (Kelvins): 200

MORE EMISSIONS ON NEXT PAGE: [ ]

MORE ASSOC. RECEIVING STATIONS ON NEXT PAGE: X

REMARKS:

NOTES ON FILLING IN THIS PAGE :

FOR EACH BEAM FIRST FILL IN THE BOX TITLED 'CHARACTERISTICS OF THE BEAM'.
FOR EACH SPACE-TO-EARTH SERVICE AREA ASSOCIATED WITH THIS BEAM, FILL IN THE UPPER PORTION OF THE BOX TITLED 'INFORMATION TO BE PROVIDED FOR THIS TRANSMITTING ANTENNA BEAM'. ALSO PROVIDE THE "EMISSION AND POWER CHARACTERISTICS" FOR THIS TRANSMITTING ANTENNA BEAM. FOR EACH SIZE (TYPE) OF RECEIVING EARTH STATION PROVIDE THE EARTH STATION DETAILS AS SPECIFIED. IF THIS IS A SPACE-TO-SPACE RELAY, IDENTIFY THE OTHER SPACE STATION(S) IN THE BOX TITLED 'SPACE STATION'. USE AS MANY PAGES AS NECESSARY.

D: SATELLITE NETWORK CHARACTERISTICS IN THE SPACE-TO-EARTH DIRECTION

SATELLITE TRANSMITTING ANTENNA BEAM DETAILS

5. CHARACTERISTICS OF THE BEAM

ADD/MOD/SUP of the beam: ☐

b. TRANSMITTING BEAM DESIGNATION: K2R — NOTE: For a steerable beam, the third character of the beam designation shall be "R"

OLD BEAM DESIGNATION (if changed): ☐☐☐

ANTENNA CHARACTERISTICS

c1/d1/f1. MAXIMUM ISOTROPIC GAIN: +/- | dBi: + | 41●0

g. POLARIZATION [1]: D

c2/d2. ANTENNA GAIN CONTOURS DIAGRAM ATTACHED SEE FIGURE NO: 02

e/f2. ANTENNA RADIATION PATTERN DIAGRAM ATTACHED SEE FIGURE NO: ☐☐

h. ESTIMATED ANTENNA GAIN DIAGRAM VS ORBIT LONGITUDE ATTACHED SEE FIGURE NO: 03

INFORMATION TO BE PROVIDED FOR THIS TRANSMITTING ANTENNA BEAM

2a. CLASS OF STATION	2b. NATURE OF SERVICE	2a. CLASS OF STATION	2b. NATURE OF SERVICE
EC	CR	☐☐	☐☐
☐☐	☐☐	☐☐	☐☐

PERIOD OF VALIDITY: 20 Years

1. SERVICE AREA: ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ OR — SERVICE AREA DIAGRAM ATTACHED: 02

3/Fb. FREQUENCY RANGE WITHIN WHICH THE CARRIERS WILL BE LOCATED

	Add/Mod/Sup of the freq. range	FREQUENCY	k/M/G Hz	IFRB IDENTIFICATION NUMBER for modification/suppression
FROM	☐	17●7000	G	☐☐☐☐☐☐☐☐☐
TO	☐	20●2000	G	☐☐☐☐☐☐☐☐☐

SPACE STATION EMISSIONS AND ASSOCIATED RECEIVING STATION(S) INFORMATION

EMISSIONS AND POWER CHARACTERISTICS

6/4a3. NECESSARY BANDWIDTH OR Fo/G3a. DESIGNATION OF EMISSION [1]	4a2/4b. TOTAL PEAK POWER [1] +/- dBW	4a1/G3b. MAXIMUM POWER DENSITY +/- dBW/Hz	4c. MINIMUM CARRIER POWER [1] +/- dBW	Fd. SPACE STATION E.I.R.P. [1] +/- dBW	8. MODULATION CHARACTERISTICS ATTACHED SEE ATTACHMENT NO. [1]
125MG7W	●☐☐☐	-60●0	●☐☐☐	●☐☐☐	☐☐
250MG7W	●☐☐☐	-63●0	●☐☐☐	●☐☐☐	☐☐
☐☐☐☐☐☐☐☐☐	●☐☐☐	●☐☐☐	●☐☐☐	●☐☐☐	☐☐
☐☐☐☐☐☐☐☐☐	●☐☐☐	●☐☐☐	●☐☐☐	●☐☐☐	☐☐
☐☐☐☐☐☐☐☐☐	●☐☐☐	●☐☐☐	●☐☐☐	●☐☐☐	☐☐
☐☐☐☐☐☐☐☐☐	●☐☐☐	●☐☐☐	●☐☐☐	●☐☐☐	☐☐

F. SPACE STATION

CHARACTERISTICS OF RECEIVING SPACE STATIONS FOR SPACE-TO-SPACE RELAYS

ADD/MOD/SUP of the station: ☐

a. SPACE STATION NAME: ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

G3c. BEACON AND TELEMETRY INFORMATION ATTACHED. SEE ATTACHMENT NO.: [1] ☐☐

MORE EMISSIONS ON NEXT PAGE: ☐ MORE ASSOC. RECEIVING STATIONS ON NEXT PAGE: ☐

EARTH STATION

ADD/MOD/SUP of the station: ☐

DESIGNATION OF TYPICAL EARTH STATION: 450cm TERMINAL

8b1. RADIATION PATTERN (give reference pattern or provide diagram): REC S465-5

8b2. ANTENNA RADIATION DIAGRAM ATTACHED SEE FIGURE NO.: ☐☐

8a. RECEIVING SYSTEM NOISE TEMPERATURE (Kelvins): 200

REMARKS:

NOTES ON FILLING IN THIS PAGE :

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FOR EACH SPACE-TO-EARTH SERVICE AREA ASSOCIATED WITH THIS BEAM, FILL IN THE UPPER PORTION OF THE BOX TITLED 'INFORMATION TO BE PROVIDED FOR THIS TRANSMITTING ANTENNA BEAM'. ALSO PROVIDE THE "EMISSION AND POWER CHARACTERISTICS" FOR THIS TRANSMITTING ANTENNA BEAM. FOR EACH SIZE (TYPE) OF RECEIVING EARTH STATION PROVIDE THE EARTH STATION DETAILS AS SPECIFIED. IF THIS IS A SPACE-TO-SPACE RELAY, IDENTIFY THE OTHER SPACE STATION(S) IN THE BOX TITLED 'SPACE STATION'. USE AS MANY PAGES AS NECESSARY

D: SATELLITE NETWORK CHARACTERISTICS IN THE SPACE-TO-EARTH DIRECTION

SATELLITE TRANSMITTING ANTENNA BEAM DETAILS

5. CHARACTERISTICS OF THE BEAM

ADD/MOD/SUP of the beam: ☐

b. TRANSMITTING BEAM DESIGNATION: K1R

NOTE: For a steerable beam, the third character of the beam designation shall be "R"

OLD BEAM DESIGNATION (if changed): ☐☐☐

ANTENNA CHARACTERISTICS

c1/d1/f1. MAXIMUM ISOTROPIC GAIN: +/- dBi: + 44.0

g. POLARIZATION [1]: D

c2/d2. ANTENNA GAIN CONTOURS DIAGRAM ATTACHED SEE FIGURE NO: 01

a/f2. ANTENNA RADIATION PATTERN DIAGRAM ATTACHED SEE FIGURE NO: ☐☐

h. ESTIMATED ANTENNA GAIN DIAGRAM VS ORBIT LONGITUDE ATTACHED SEE FIGURE NO: 03

INFORMATION TO BE PROVIDED FOR THIS TRANSMITTING ANTENNA BEAM

2a. CLASS OF STATION	2b. NATURE OF SERVICE	2a. CLASS OF STATION	2b. NATURE OF SERVICE
ER	OT	EK	OT
ET	OT		

PERIOD OF VALIDITY: 20 Years

1. SERVICE AREA: ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ OR

SERVICE AREA DIAGRAM ATTACHED: 01

3/Fb. FREQUENCY RANGE WITHIN WHICH THE CARRIERS WILL BE LOCATED

	Add/Mod/Sup of the freq. range	FREQUENCY k/M/G Hz	IFRB IDENTIFICATION NUMBER for modification/suppression
FROM	☐	19.7000 G	
TO	☐	20.2000 G	

SPACE STATION EMISSIONS AND ASSOCIATED RECEIVING STATION(S) INFORMATION

EMISSIONS AND POWER CHARACTERISTICS

6/4a3. NECESSARY BANDWIDTH OR Fc/G3a. DESIGNATION OF EMISSION [1]	4a2/4b. TOTAL PEAK POWER [1] +/- dBW	4a1/G3b. MAXIMUM POWER DENSITY +/- dBW/Hz	4c. MINIMUM CARRIER POWER [1] +/- dBW	Fd. SPACE STATION E.I.R.P. [1] +/- dBW	8. MODULATION CHARACTERISTICS ATTACHED SEE ATTACHMENT NO. [1]
600KG7D		-47.0			

F. SPACE STATION

CHARACTERISTICS OF RECEIVING SPACE STATIONS FOR SPACE-TO-SPACE RELAYS

ADD/MOD/SUP of the station: ☐

a. SPACE STATION NAME: ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

G3c. BEACON AND TELEMETRY INFORMATION ATTACHED. SEE ATTACHMENT NO.: [1] ☐☐

MORE EMISSIONS ON NEXT PAGE: ☐

EARTH STATION

ADD/MOD/SUP of the station: ☐

DESIGNATION OF TYPICAL EARTH STATION: TT&C STATION

8b1. RADIATION PATTERN (give reference pattern or provide diagram): REC S465-5

8b2. ANTENNA RADIATION DIAGRAM ATTACHED SEE FIGURE NO.: ☐☐

8a. RECEIVING SYSTEM NOISE TEMPERATURE: 200 Kelvins

MORE ASSOC. RECEIVING STATIONS ON NEXT PAGE: ☐

REMARKS: Maximum power density signals, as given in item 4a1/G3b above, will only be transmitted when operating with a transmit beam that provides greater than 25° elevation angle within its -10 dB gain contour. Maximum power density will be correspondingly reduced for lower elevation angles, in order to comply with the PFD limits of Article 28 of the RR.

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D: SATELLITE NETWORK CHARACTERISTICS IN THE SPACE-TO-EARTH DIRECTION

SATELLITE TRANSMITTING ANTENNA BEAM DETAILS

5. CHARACTERISTICS OF THE BEAM

ADD/MOD/SUP of the beam: ☐

b. TRANSMITTING BEAM DESIGNATION: SER

NOTE: For a steerable beam, the third character of the beam designation shall be "R"

OLD BEAM DESIGNATION (if changed): ☐☐☐

ANTENNA CHARACTERISTICS

c1/d1/l1. MAXIMUM ISOTROPIC GAIN: +/- dBi: + 55.0

g. POLARIZATION [1]: D

c2/d2. ANTENNA GAIN CONTOURS DIAGRAM ATTACHED SEE FIGURE NO: ☐☐

e/f2. ANTENNA RADIATION PATTERN DIAGRAM ATTACHED SEE FIGURE NO: 04

h. ESTIMATED ANTENNA GAIN DIAGRAM VS ORBIT LONGITUDE ATTACHED SEE FIGURE NO: ☐☐

INFORMATION TO BE PROVIDED FOR THIS TRANSMITTING ANTENNA BEAM

2a. CLASS OF STATION	2b. NATURE OF SERVICE	2a. CLASS OF STATION	2b. NATURE OF SERVICE
ES	OT	☐☐	☐☐
☐☐	☐☐	☐☐	☐☐

PERIOD OF VALIDITY: 20 Years

1. SERVICE AREA: ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ OR

SERVICE AREA DIAGRAM ATTACHED: 04

3/Fb. FREQUENCY RANGE WITHIN WHICH THE CARRIERS WILL BE LOCATED

	Add/Mod/Sup of the freq. range	FREQUENCY	k/M/G Hz	IFRB IDENTIFICATION NUMBER for modification/suppression
FROM	☐	59.00000	G	☐☐☐☐☐☐☐☐
TO	☐	64.00000	G	☐☐☐☐☐☐☐☐

SPACE STATION EMISSIONS AND ASSOCIATED RECEIVING STATION(S) INFORMATION

EMISSIONS AND POWER CHARACTERISTICS

6/4a3. NECESSARY BANDWIDTH OR Fc/G3a. DESIGNATION OF EMISSION [1]	4a2/4b. TOTAL PEAK POWER [1] +/- dBW	4a1/G3b. MAXIMUM POWER DENSITY +/- dBW/Hz	4c. MINIMUM CARRIER POWER [1] +/- dBW	Fd. SPACE STATION E.I.R.P. [1] +/- dBW	8. MODULATION CHARACTERISTICS ATTACHED SEE ATTACHMENT NO. [1]
1G00G7W		-70.0			

F. SPACE STATION

CHARACTERISTICS OF RECEIVING SPACE STATIONS FOR SPACE-TO-SPACE RELAYS

ADD/MOD/SUP of the station: ☐

a. SPACE STATION NAME: USASAT-☐☐☐ at 29° W ☐

G3c. BEACON AND TELEMETRY INFORMATION ATTACHED. SEE ATTACHMENT NO.: [1] ☐☐

MORE EMISSIONS ON NEXT PAGE: ☐

MORE ASSOC. RECEIVING STATIONS ON NEXT PAGE: ☐

EARTH STATION

ADD/MOD/SUP of the station: ☐

DESIGNATION OF TYPICAL EARTH STATION: ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

8b1. RADIATION PATTERN (give reference pattern or provide diagram): ☐☐☐☐☐☐☐☐☐☐☐☐☐☐

8a. RECEIVING SYSTEM NOISE TEMPERATURE Kelvins: ☐☐☐☐☐

8b2. ANTENNA RADIATION DIAGRAM ATTACHED SEE FIGURE NO.: ☐☐

REMARKS:

NOTES ON FILLING IN THIS PAGE :

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D: SATELLITE NETWORK CHARACTERISTICS IN THE SPACE-TO-EARTH DIRECTION

SATELLITE TRANSMITTING ANTENNA BEAM DETAILS

5. CHARACTERISTICS OF THE BEAM

ADD/MOD/SUP of the beam: ☐

b. TRANSMITTING BEAM DESIGNATION: SER — NOTE: For a steerable beam, the third character of the beam designation shall be "R"

OLD BEAM DESIGNATION (if changed): ☐☐☐

ANTENNA CHARACTERISTICS

c1/d1/f1. MAXIMUM ISOTROPIC GAIN: +/- dBi: + 55.0

g. POLARIZATION [1]: D

c2/d2. ANTENNA GAIN CONTOURS DIAGRAM ATTACHED SEE FIGURE NO: ☐☐

e/f2. ANTENNA RADIATION PATTERN DIAGRAM ATTACHED SEE FIGURE NO: 04

h. ESTIMATED ANTENNA GAIN DIAGRAM VS ORBIT LONGITUDE ATTACHED SEE FIGURE NO: ☐☐

INFORMATION TO BE PROVIDED FOR THIS TRANSMITTING ANTENNA BEAM

2a. CLASS OF STATION	2b. NATURE OF SERVICE	2a. CLASS OF STATION	2b. NATURE OF SERVICE
ES	OT	☐☐	☐☐
☐☐	☐☐	☐☐	☐☐

PERIOD OF VALIDITY: 20 Years

1. SERVICE AREA: ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ OR — SERVICE AREA DIAGRAM ATTACHED: 04

3/Fb. FREQUENCY RANGE WITHIN WHICH THE CARRIERS WILL BE LOCATED

	Add/Mod/Sup of the freq. range	FREQUENCY	k/M/G Hz	IFRB IDENTIFICATION NUMBER for modification/suppression
FROM	☐	5425000	G	☐☐☐☐☐☐☐☐☐
TO	☐	5820000	G	☐☐☐☐☐☐☐☐☐

SPACE STATION EMISSIONS AND ASSOCIATED RECEIVING STATION(S) INFORMATION

EMISSIONS AND POWER CHARACTERISTICS

6/4a3. NECESSARY BANDWIDTH OR Fc/G3a. DESIGNATION OF EMISSION [1]	4a2/4b. TOTAL PEAK POWER [1] +/- dBW	4a1/G3b. MAXIMUM POWER DENSITY +/- dBW/Hz	4c. MINIMUM CARRIER POWER [1] +/- dBW	Fd. SPACE STATION E.I.R.P. [1] +/- dBW	8. MODULATION CHARACTERISTICS ATTACHED SEE ATTACHMENT NO. [1]
1G00G7W		-70.0			

F. SPACE STATION

CHARACTERISTICS OF RECEIVING SPACE STATIONS FOR SPACE-TO-SPACE RELAYS

ADD/MOD/SUP of the station: ☐

a. SPACE STATION NAME: USASAT-☐☐☐at☐☐29°W

G3c. BEACON AND TELEMETRY INFORMATION ATTACHED. SEE ATTACHMENT NO.: [1] ☐☐

MORE EMISSIONS ON NEXT PAGE: ☐

MORE ASSOC. RECEIVING STATIONS ON NEXT PAGE: ☐

EARTH STATION

ADD/MOD/SUP of the station: ☐

DESIGNATION OF TYPICAL EARTH STATION: ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

8b1. RADIATION PATTERN (give reference pattern or provide diagram): ☐☐☐☐☐☐☐☐☐☐☐☐☐☐

8b2. ANTENNA RADIATION DIAGRAM ATTACHED SEE FIGURE NO.: ☐☐

8a. RECEIVING SYSTEM NOISE TEMPERATURE — Kelvins: ☐☐☐☐☐

REMARKS:

NOTES ON FILLING IN THIS PAGE :

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D: SATELLITE NETWORK CHARACTERISTICS IN THE SPACE-TO-EARTH DIRECTION

SATELLITE TRANSMITTING ANTENNA BEAM DETAILS

5. CHARACTERISTICS OF THE BEAM

ADD/MOD/SUP of the beam: ☐

b. TRANSMITTING BEAM DESIGNATION: SWR — NOTE: For a steerable beam, the third character of the beam designation shall be "R"

OLD BEAM DESIGNATION (if changed): ☐☐☐

ANTENNA CHARACTERISTICS

c1/d1/f1. MAXIMUM ISOTROPIC GAIN: +/- | dBi → + 55.0

g. POLARIZATION [1]: D

c2/d2. ANTENNA GAIN CONTOURS DIAGRAM ATTACHED SEE FIGURE NO: ☐☐

e/f2. ANTENNA RADIATION PATTERN DIAGRAM ATTACHED SEE FIGURE NO: 04

h. ESTIMATED ANTENNA GAIN DIAGRAM VS ORBIT LONGITUDE ATTACHED SEE FIGURE NO: ☐☐

INFORMATION TO BE PROVIDED FOR THIS TRANSMITTING ANTENNA BEAM

2a. CLASS OF STATION	2b. NATURE OF SERVICE	2a. CLASS OF STATION	2b. NATURE OF SERVICE
ES	OT	☐☐	☐☐
☐☐	☐☐	☐☐	☐☐

PERIOD OF VALIDITY: 20 Years

1. SERVICE AREA: ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ OR

SERVICE AREA DIAGRAM ATTACHED: 04

3/Fb. FREQUENCY RANGE WITHIN WHICH THE CARRIERS WILL BE LOCATED

	Add/Mod/Sup of the freq. range	FREQUENCY	k/M/G Hz	IFRB IDENTIFICATION NUMBER for modification/suppression
FROM	☐	590.0000	G	☐☐☐☐☐☐☐☐
TO	☐	640.0000	G	☐☐☐☐☐☐☐☐

SPACE STATION EMISSIONS AND ASSOCIATED RECEIVING STATION(S) INFORMATION

EMISSIONS AND POWER CHARACTERISTICS

6/4a3. NECESSARY BANDWIDTH OR Fc/G3a. DESIGNATION OF EMISSION [1]	4a2/4b. TOTAL PEAK POWER [1] +/- dBW	4a1/G3b. MAXIMUM POWER DENSITY +/- dBW/Hz	4c. MINIMUM CARRIER POWER [1] +/- dBW	Fd. SPACE STATION E.I.R.P. [1] +/- dBW	8. MODULATION CHARACTERISTICS ATTACHED SEE ATTACHMENT NO. [1]
1G00G7W		-70.0			

F. SPACE STATION

CHARACTERISTICS OF RECEIVING SPACE STATIONS FOR SPACE-TO-SPACE RELAYS

ADD/MOD/SUP of the station: ☐

a. SPACE STATION NAME: USASAT-☐☐☐ at 168°E

G3c. BEACON AND TELEMETRY INFORMATION ATTACHED. SEE ATTACHMENT NO.: [1] ☐☐

MORE EMISSIONS ON NEXT PAGE: ☐

MORE ASSOC. RECEIVING STATIONS ON NEXT PAGE: ☐

EARTH STATION

ADD/MOD/SUP of the station: ☐

DESIGNATION OF TYPICAL EARTH STATION: ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

8b1. RADIATION PATTERN (give reference pattern or provide diagram): ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

8b2. ANTENNA RADIATION DIAGRAM ATTACHED SEE FIGURE NO.: ☐☐

8a. RECEIVING SYSTEM NOISE TEMPERATURE — Kelvins: ☐☐☐☐☐☐

REMARKS:

NOTES ON FILLING IN THIS PAGE :

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D: SATELLITE NETWORK CHARACTERISTICS IN THE SPACE-TO-EARTH DIRECTION

SATELLITE TRANSMITTING ANTENNA BEAM DETAILS

5. CHARACTERISTICS OF THE BEAM

ADD/MOD/SUP of the beam: ☐

b. TRANSMITTING BEAM DESIGNATION: SWR — NOTE: For a steerable beam, the third character of the beam designation shall be "R"

OLD BEAM DESIGNATION (if changed): ☐☐☐

ANTENNA CHARACTERISTICS

c1/d1/f1. MAXIMUM ISOTROPIC GAIN: +/- dBi: + 55●0

g. POLARIZATION [1]: D

c2/d2. ANTENNA GAIN CONTOURS DIAGRAM ATTACHED SEE FIGURE NO: ☐☐

e/f2. ANTENNA RADIATION PATTERN DIAGRAM ATTACHED SEE FIGURE NO: 04

h. ESTIMATED ANTENNA GAIN DIAGRAM VS ORBIT LONGITUDE ATTACHED SEE FIGURE NO: ☐☐

INFORMATION TO BE PROVIDED FOR THIS TRANSMITTING ANTENNA BEAM

2a. CLASS OF STATION	2b. NATURE OF SERVICE	2a. CLASS OF STATION	2b. NATURE OF SERVICE
ES	OT		

PERIOD OF VALIDITY: 20 Years

1. SERVICE AREA: ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ . OR

SERVICE AREA DIAGRAM ATTACHED: 04

3/Fb. FREQUENCY RANGE WITHIN WHICH THE CARRIERS WILL BE LOCATED

	Add/Mod/Sup of the freq. range	FREQUENCY	k/M/G Hz	IFRB IDENTIFICATION NUMBER for modification/suppression
FROM	☐	542●5000	G	
TO	☐	582●0000	G	

SPACE STATION EMISSIONS AND ASSOCIATED RECEIVING STATION(S) INFORMATION

EMISSIONS AND POWER CHARACTERISTICS

6/4a3. NECESSARY BANDWIDTH OR Fc/G3a. DESIGNATION OF EMISSION [1]	4a2/4b. TOTAL PEAK POWER [1] +/- dBW	4a1/G3b. MAXIMUM POWER DENSITY +/- dBW/Hz	4c. MINIMUM CARRIER POWER [1] +/- dBW	Fd. SPACE STATION E.I.R.P. [1] +/- dBW	8. MODULATION CHARACTERISTICS ATTACHED SEE ATTACHMENT NO. [1]
1G00G7W	●	-70●0	●	●	
	●	●	●	●	
	●	●	●	●	
	●	●	●	●	
	●	●	●	●	
	●	●	●	●	

F. SPACE STATION

CHARACTERISTICS OF RECEIVING SPACE STATIONS FOR SPACE-TO-SPACE RELAYS

ADD/MOD/SUP of the station: ☐

a. SPACE STATION NAME: USASAT-☐☐☐ at 168°E

G3c. BEACON AND TELEMETRY INFORMATION ATTACHED. SEE ATTACHMENT NO.: [1] ☐☐

MORE EMISSIONS ON NEXT PAGE: ☐

MORE ASSOC. RECEIVING STATIONS ON NEXT PAGE: ☐

EARTH STATION

ADD/MOD/SUP of the station: ☐

DESIGNATION OF TYPICAL EARTH STATION: ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

8b1. RADIATION PATTERN (give reference pattern or provide diagram): ☐☐☐☐☐☐☐☐☐☐☐☐

8a. RECEIVING SYSTEM NOISE TEMPERATURE — Kelvins: ☐☐☐☐☐

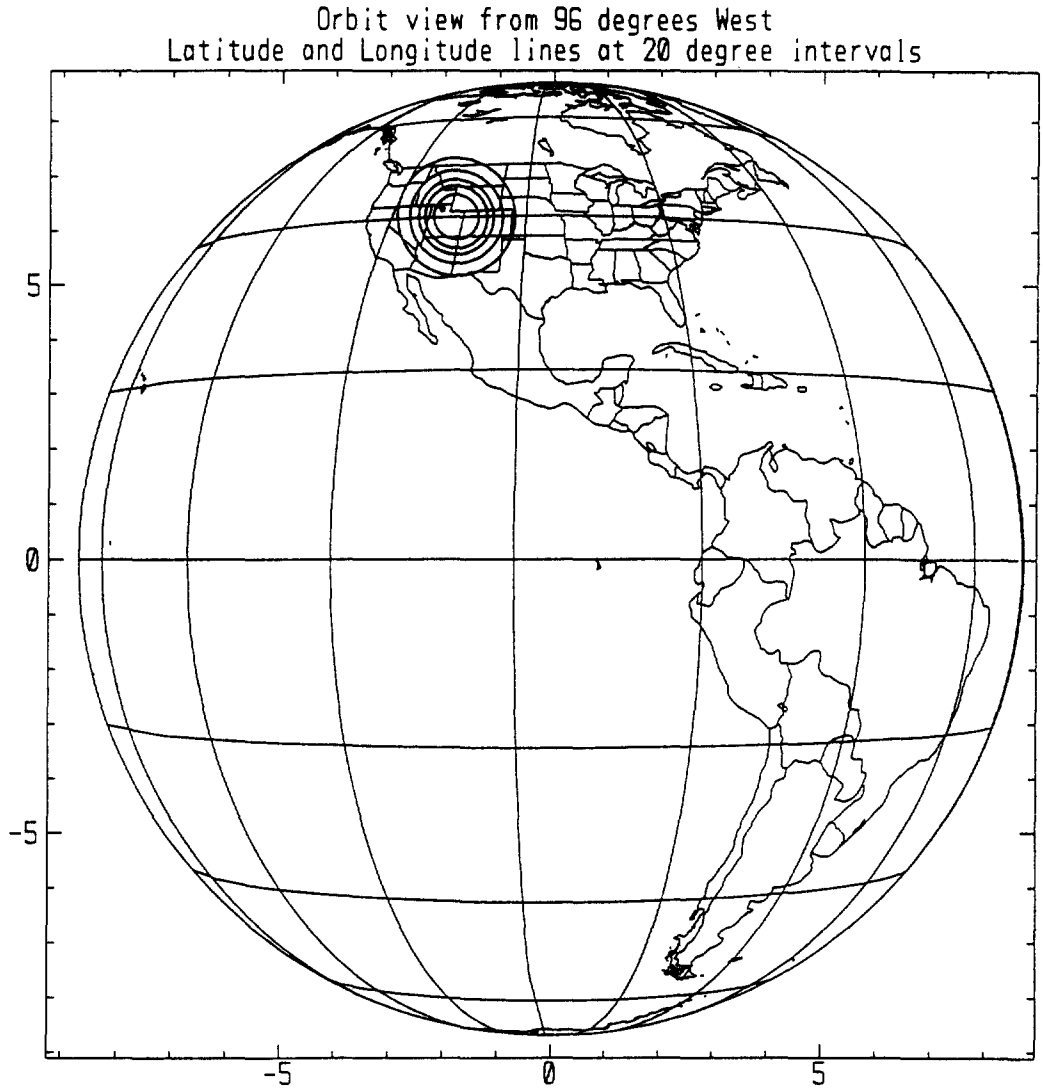
8b2. ANTENNA RADIATION DIAGRAM ATTACHED SEE FIGURE NO.: ☐☐

REMARKS:

NOTES ON FILLING IN THIS PAGE :

FOR EACH BEAM FIRST FILL IN THE BOX TITLED 'CHARACTERISTICS OF THE BEAM'.
FOR EACH SPACE-TO-EARTH SERVICE AREA ASSOCIATED WITH THIS BEAM, FILL IN THE UPPER PORTION OF THE BOX TITLED 'INFORMATION TO BE PROVIDED FOR THIS TRANSMITTING ANTENNA BEAM'. ALSO PROVIDE THE "EMISSION AND POWER CHARACTERISTICS" FOR THIS TRANSMITTING ANTENNA BEAM. FOR EACH SIZE (TYPE) OF RECEIVING EARTH STATION PROVIDE THE EARTH STATION DETAILS AS SPECIFIED. IF THIS IS A SPACE-TO-SPACE RELAY, IDENTIFY THE OTHER SPACE STATION(S) IN THE BOX TITLED 'SPACE STATION'. USE AS MANY PAGES AS NECESSARY.

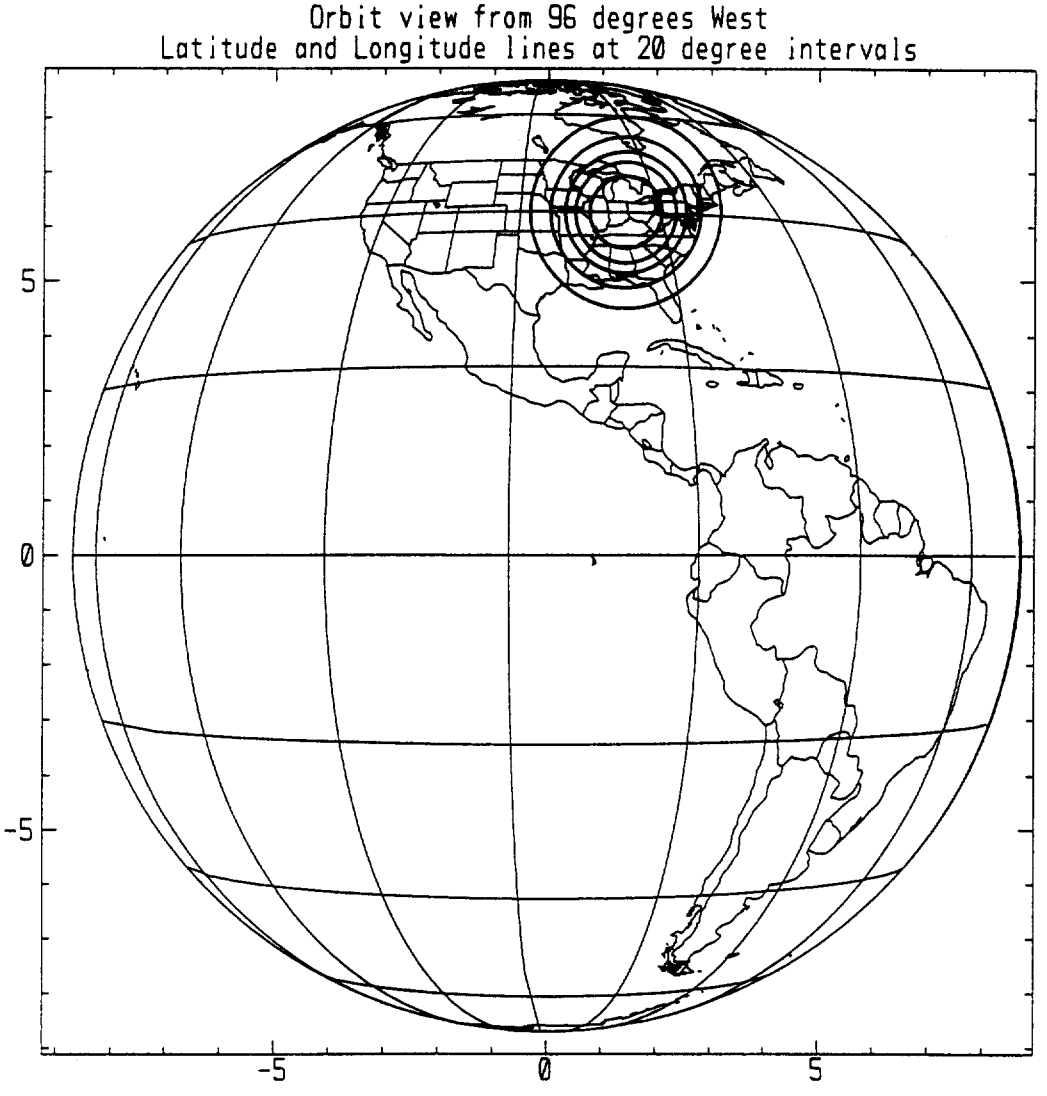
FIGURE 01
SPACE STATION RECEIVING AND TRANSMITTING
ANTENNA GAIN CONTOURS FOR BEAM "K1R"



Notes:

1. The space station antenna coverage actually consists of multiple overlapping spot-beams, designed to cover all the visible land areas, and capable of being pointed to any part of the visible Earth's surface. Only one such typical spot-beam is shown as an example. All beams may operate at all associated assigned frequencies.
2. Service area consists of all visible land areas of the Earth.
3. Maximum isotropic gain is +44.0 dBi.
4. Contours shown are -2, -4, -6, -10 and -20 dB relative to maximum gain.
5. Does not include antenna pointing error which is ±0.15° worst case.

FIGURE 02
SPACE STATION RECEIVING AND TRANSMITTING
ANTENNA GAIN CONTOURS FOR BEAM "K2R"



Notes:

1. The space station antenna coverage actually consists of a steerable beam, capable of being pointed to any part of the visible Earth's surface.
2. Service area consists of all visible land areas of the Earth.
3. Maximum isotropic gain is +41.0 dBi.
4. Contours shown are -2, -4, -6, -10 and -20 dB relative to maximum gain.
5. Does not include antenna pointing error which is ±0.15° worst case.

FIGURE 03
GAIN TOWARDS GEOSTATIONARY SATELLITE ORBIT
FOR BEAMS "K1R" AND "K2R"

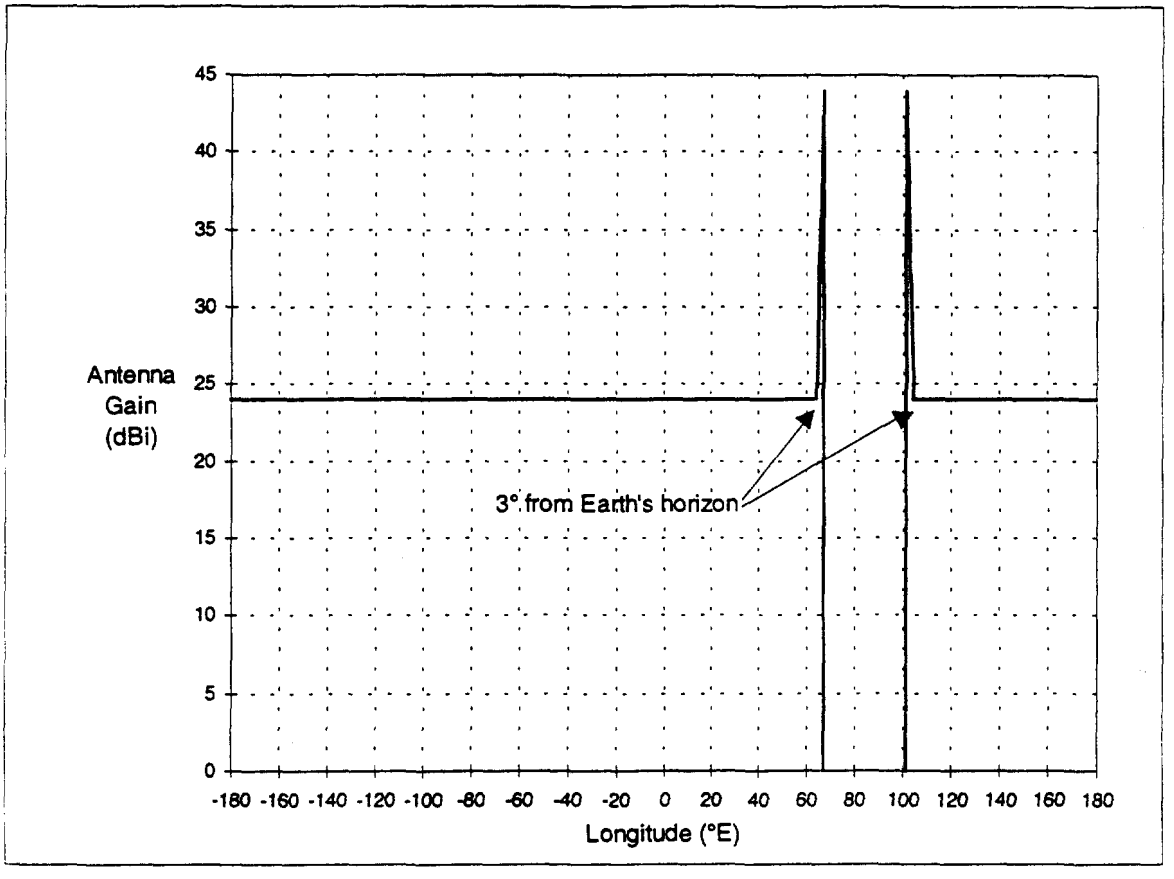


FIGURE 04
SPACE STATION ANTENNA RADIATION PATTERN
FOR BEAMS "SER" AND "SWR"

Angle from Boresight (°)	Maximum Gain (dBi)
-180	+30
all angles from -180 to -2	+30
-2.0	+30
-1.7	+35
-1.5	+40
-1.3	+45
-1.0	+50
-0.5	+53
0.0	+55
0.5	+53
1.0	+50
1.3	+45
1.5	+40
1.7	+35
2.0	+30
all angles from 2 to 180	+30
180	+30

Notes:

1. Antenna is rotationally symmetric.
2. Nominal boresight directions are as follows:
   Beam SER: 29°W geostationary orbit
   Beam SWR: 168°E geostationary orbit.
3. Service area is within ±2° of boresight.
4. Beam is steerable.